# TRANSLATION PATENT COOPERATION TREATY

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference C1-A0313P3 FOR FURTH |   |                  |                    | FOR FURTHER                                | ACTION   | See Form PCT/IPEA/416   |  |  |
|--|---|------------------|--------------------|--|--|---|--|--|
| International application No. International fili           |   |                  |                    | international filing o                     | late (day/month/year)  | Priority date (day/month/year)  |  |  |
| PCT  | PCT/JP2004/014911 08.10.20  |                  |                    |  | 04   | 10.10.2003  |  |  |
| i i  | International Patent Classification (IPC) or national classification a  |                  |                    |  | IPC  |   |  |  |
| J  |   |                  |                    |  | A61P7/04   |   |  |  |
| CHU  |   | IYAKU            | KABUSH             | IKI KAISH                                  | A<br>  |   |  |  |
| 1.   |   |                  |                    | nary examination re<br>applicant according |  | nis International Preliminary Examining Authority   |  |  |
| 2.   | This REPOR  | RT consists      | of a total of _6   |  | sheets, inclu  | ding this cover sheet.  |  |  |
| 3.   | This report i   | s also accor     | mpanied by AN      | NEXES, comprising                          | ;  |   |  |  |
|  | a 🔲 (   | sent to the      | applicant and to   | the International B                        | ureau) a total of  | sheets, as follows:   |  |  |
| !<br> <br>   |   | sheets<br>sheets | of the description | on, claims and/or dr                       | awings which have be   | en amended and are the basis for this report and/or<br>Rule 70.16 and Section 607 of the Administrative |  |  |
|  | Instructions).  sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. |                  |                    |  |  |   |  |  |
|  | b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))   |                  |                    |  |  |   |  |  |
|  | •   |                  |                    |  |  |   |  |  |
|  | containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).                                    |                  |                    |  |  |   |  |  |
| 4.   | This report o   | ontains ind      | lications relating | to the following ite                       | ms;  |   |  |  |
|  | Вох   | No. I            | Basis of the re    | port                                       |  |   |  |  |
|  | Вох   | No. II           | Priority           |  |  |   |  |  |
|  | Box No. III Non-establishment of opinion wit  |                  |                    | ment of opinion with                       | h regard to novelty, inventive step and industrial applicability |   |  |  |
|  | Box   | No. IV           | Lack of unity      | of invention                               |  |   |  |  |
|  | Box No. V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement  |                  |                    |  |  | ovelty, inventive step or industrial applicability:   |  |  |
|  | Box   | No. VI           | Certain docum      | ents cited                                 |  |   |  |  |
|  | Вох   | No. VII          | Certain defect     | s in the international                     | application  |   |  |  |
|  | Box No. VIII Certain observations on the international application  |                  |                    |  |  |   |  |  |
| Date of s  | ub mission of   | the demand       | 1                  |  | Date of completion of  | f this report   |  |  |
| Name and   | Name and mailing address of the IPEA/JP   |                  |                    |  | Authorized officer   |   |  |  |
|  |   |                  |                    |  |  |   |  |  |
| Facsimile No.  |   |                  |                    |  | Telephone No.  |   |  |  |

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| Box | No. I       | Basis of the report  |   |
|-----|-------------|--|---|
| 1.  |             | h regard to the language, this report is based on the interna<br>cated under this item.                                    | ional application in the language in which it was filed, unless otherwise   |
|     |             | This report is based on translations from the original lang<br>which is the language of a translation furnished for the pr | · · · · · · · · · · · · · · · · · · ·   |
|     |             | international search (Rule 12.3 and 23.1(b))   |   |
|     |             | publication of the international application (Rule 12  | 2.4)  |
| _   | VI          | international preliminary examination (Rule 55.2 as  |   |
| 2.  | rece        |  | is report is based on (replacement sheets which have been furnished to the<br>ure referred to in this report as "originally filed" and are not annexed to |
|     | M           | the international application as originally filed/furnished  |   |
|     | Ш           | the description:   |   |
|     |             | pages  |   |
|     |             | page 6   | received by this Authority on   |
|     |             | pages*   | received by this Authority on   |
|     | Ш           | the claims:  |   |
|     |             | nos.   | as originally filed/furnished   |
|     |             | nos.*  | as amended (together with any statement) under Article 19   |
|     |             | nos.*  | received by this Authority on   |
|     |             | nos.*  | received by this Authority on   |
|     |             | the drawings:  | ·   |
|     |             | sheets   | as originally filed/furnished   |
|     |             | sheets*  | received by this Authority on   |
|     |             | sheets*  | received by this Authority on   |
|     | $\boxtimes$ | a sequence listing and/or any related table(s) - see Supple  | mental Box Relating to Sequence Listing.  |
| 3.  |             | The amendments have resulted in the cancellation of:   |   |
|     |             | the description, pages   |   |
|     |             | the claims, nos.   |   |
|     |             | the drawings, sheets/figs  |   |
|     |             |  |   |
|     |             | any table(s) related to sequence listing (specify):  |   |
| 4.  |             | This report has been established as if (some of) the amer<br>they have been considered to go beyond the disclosure as      | adments annexed to this report and listed below had not been made, since filed, as indicated in the Supplemental Box (Rule 70.2(c)).                      |
|     |             | the description, pages   |   |
|     |             |  |   |
|     |             | the drawings, sheets/figs  |   |
|     | 1           | the sequence listing (specify):  |   |
|     |             | any table(s) related to sequence listing (specify):  |   |
|     | If iter     | m 4 applies, some or all of those sheets may be marked "su   | perseded."  |

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|             |  | 101/012004/014311                           |  |  |  |  |
|-------------|--|---|--|--|--|--|
| Box No. II  | I Non-establishment of opinion with regard to novelty, inventive step and in   | fustrial applicability                      |  |  |  |  |
|             | The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:                        |   |  |  |  |  |
|             | the entire international application   |   |  |  |  |  |
| $\boxtimes$ | claims Nos. 14,17  |   |  |  |  |  |
| because     |  |   |  |  |  |  |
|             | the said international application, or the said claims Nos. 14,17  |   |  |  |  |  |
|             | relate to the following subject matter which does not require an international preliminary   | examination (specify):                      |  |  |  |  |
|             | The subject matter of claims 14 and  | d 17 relates to                             |  |  |  |  |
|             | methods for treatment of the human body  | by therapy.                                 |  |  |  |  |
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|             | the description, claims or drawings (indicate particular elements below) or said claims N  | 'ns   |  |  |  |  |
|             | the description, claims or drawings (indicate particular elements below) or said claims re<br>are so unclear that no meaningful opinion could be formed (specify):   | ·   |  |  |  |  |
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|             | the claims, or said claims Nos.  | are so inadequately supported               |  |  |  |  |
| <u> </u>    | by the description that no meaningful opinion could be formed.   |   |  |  |  |  |
| $\boxtimes$ | no international search report has been established for said claims Nos. 14, 17  |   |  |  |  |  |
|             | the nucleotide and/or amino acid sequence listing does not comply with the standard pro-<br>Instructions in that:  | ovided for in Annex C of the Administrative |  |  |  |  |
| t           | the written form has not been furnished  |   |  |  |  |  |
|             | does not comply with the standard  |   |  |  |  |  |
| ť           | the computer readable form has not been furnished  | has not been furnished                      |  |  |  |  |
|             | does not comply with the standard  |   |  |  |  |  |
|             | he tables related to the nucleotide and/or amino acid sequence listing. if in computer rechnical requirements provided for in Annex C-bis of the Administrative Instructions.                                    | readable form only, do not comply with the  |  |  |  |  |
|             | See Supplemental Box for further details.  |   |  |  |  |  |
|             | does not comply with the standard  he tables related to the nucleotide and/or amino acid sequence listing, if in computer rechnical requirements provided for in Annex C-bis of the Administrative Instructions. | readable form only, do not comply with the  |  |  |  |  |
|             |  |   |  |  |  |  |

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| Box | K No. V   | Reasoned stateme<br>citations and expla |        |       |     |     | ty, inventive step | or industrial applicability; |       |
|-----|-----------|---|--------|-------|-----|-----|--------------------|------------------------------|-------|
| 1.  | Statement |   |        |       |     |     |                    |                              |       |
|     | Novelty   | y (N)                                   | Claims | 1-13, | 15, | 16, | 18                 |                              | YES   |
|     |           |   | Claims |       |     |     |                    |                              | NO.   |
|     | Inventi   | ve step (IS)                            | Claims | 1-13, | 15, | 16, | 18                 |                              | YES   |
|     |           |   | Claims |       |     |     | · · · · ·          |                              | _ NO  |
|     | Industri  | ial applicability (IA)                  | Claims | 1-13, | 15, | 16, | 18                 |                              | _ YES |
|     |           |   | Claims |       |     |     |                    |                              | _ NO  |
|     |           |   |        |       |     |     |                    |                              |       |

- 2. Citations and explanations (Rule 70.7)
  - Document 1: JP 5-501543 A (Immunomedics Inc.), 25 March 1993 & WO 91/08770 A1 & EP 505357 A1
  - Document 2: JP 5-203652 A (FUJIFILM Co., Ltd.), 10 August 1993 (Family: none)
  - Document 3: J. Immunol. Methods, Vol. 267, No. 2, pages 213 to 226 (2002)
  - Document 4: J. Immunol. Methods, Vol. 279, No. 1 and 2, pages 219 to 232 (August 2003)
  - Document 5: J. Immunol. Methods, Vol. 150, No. 10, pages 4610 to 4619 (1993)
  - Document 6: J. Immunol. Methods, Vol. 248, No. 1 and 2, pages 7 to 15 (2001)

## Claims 1 to 13, 15, 16 and 18

The invention set forth in claims 1 to 13, 15, 16 and 18 is novel and involves an inventive step in relation to documents 1 to 6 cited in the international search report.

Documents 1 to 6 neither disclose nor suggest a bispecific antibody which recognizes both an enzyme and a ground substance of said enzyme.

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

(1) The description only specifically discloses a bispecific antibody which recognizes both blood coagulation factor IX/IXa as "an enzyme" and blood coagulation factor X as "a ground substance of said enzyme", and the more general "bispecific antibody" set forth in claims 1 to 3 is not fully supported by the description.

Form PCT/IPEA/409 (Box VIII) (January 2004)

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| Supplemental Box Relating to Sequence Listing   |  |  |  |  |
|---|--|--|--|--|
| Continuation of Box No. 1, item 2:  |  |  |  |  |
| <ol> <li>With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention,<br/>this report was established on the basis of:</li> </ol>  |  |  |  |  |
| a. type of material   |  |  |  |  |
| a sequence listing  |  |  |  |  |
| table(s) related to the sequence listing  |  |  |  |  |
| b. formal of material   |  |  |  |  |
| in written format   |  |  |  |  |
| in computer readable form   |  |  |  |  |
| c. time of filing/furnishing  |  |  |  |  |
| contained in the international application as filed   |  |  |  |  |
| filed together with the international application in computer readable form   |  |  |  |  |
| furnished subsequently to this Authority for the purposes of search and/or examination  |  |  |  |  |
| received by this Authority as an amendment* on  |  |  |  |  |
| 2. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished. |  |  |  |  |
| 3. Additional comments:   |  |  |  |  |
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| <ul> <li>If item 4 in Box No. I applies, the listing and/or table(s) related thereto, which form part of the basis of the report, may be marked "superseded."</li> </ul>  |  |  |  |  |